

Tackling coffee cups: Innovation, identification and investment

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The art of the possible: **Innovation, Identification and Investment**

The Issues

295 million hot
and cold cups

Compostable cups made
from PLA with CPLA lids

Paper/plastic lined cups
and recyclable lids

The Solutions

Introduce identification
system for cups

Innovate new products
which facilitate
composting or recycling

Invest in compost
facilities at events
or venues

Read the report bit.ly/CompostingCups

**Join the Public Place Recycling Scheme to be
part of the solution. Visit recycling.kiwi.nz.**

What is the packaging industry doing? industry working group

- The Packaging Forum
- Beyond The Bin
- Manufacturers/distributors
 - Biopak, Bunzl, Detpak, Ecoware, Huhtakmaki, Innocent Packaging, NZ Safety Blackwoods, TreefreeNZ
- Coffee/drinks brands
 - Cafe Laffare, Coca Cola Amatil, Columbus Coffee, Z
- Recyclers/waste industry
 - EnviroNZ, Smart Environmental, Visy
- WasteMINZ



(A review of) the availability of NZ composters to process compostable packaging (coffee cups)

Purpose	Detail
Introduction	<ul style="list-style-type: none">• 295 million coffee cups sent to landfill/annum• Review previous study• TPF - assess other end of life solutions
Purpose	Identify capability and capacity of NZ composters to process compostable coffee cups
Focus areas	<ul style="list-style-type: none">• Experience processing compostable packaging including PLA & C-PLA• Decontamination and/or shredding practices (if any)• Identification preferences• Barriers for composters
Methodology	Phone/online survey
Discussion points	Facility type, duration, heat, inputs, outputs, regulatory compliance, barriers, opportunities, opportunities for trials, capacity, experience, identification

Findings

- 27 facilities studied
- 67% operated windrow (primary) facilities with an average processing time of 8 months
- Average max temp: 69.45°C (all)
- 52% accepted compostable packaging
- 78% employed shredder
- 56% decontaminate product onsite
- 2% median acceptable contamination level

Barriers/issues to process compostable packaging

- Requires extra/long/hotter cycle
- Shredding requirements
- Confusion with conventional (non-compostable) materials
- Variation of compostable products including thickness
- Organic certification requirements
- Regulatory requirements
- Weight vs. volume
- Contamination

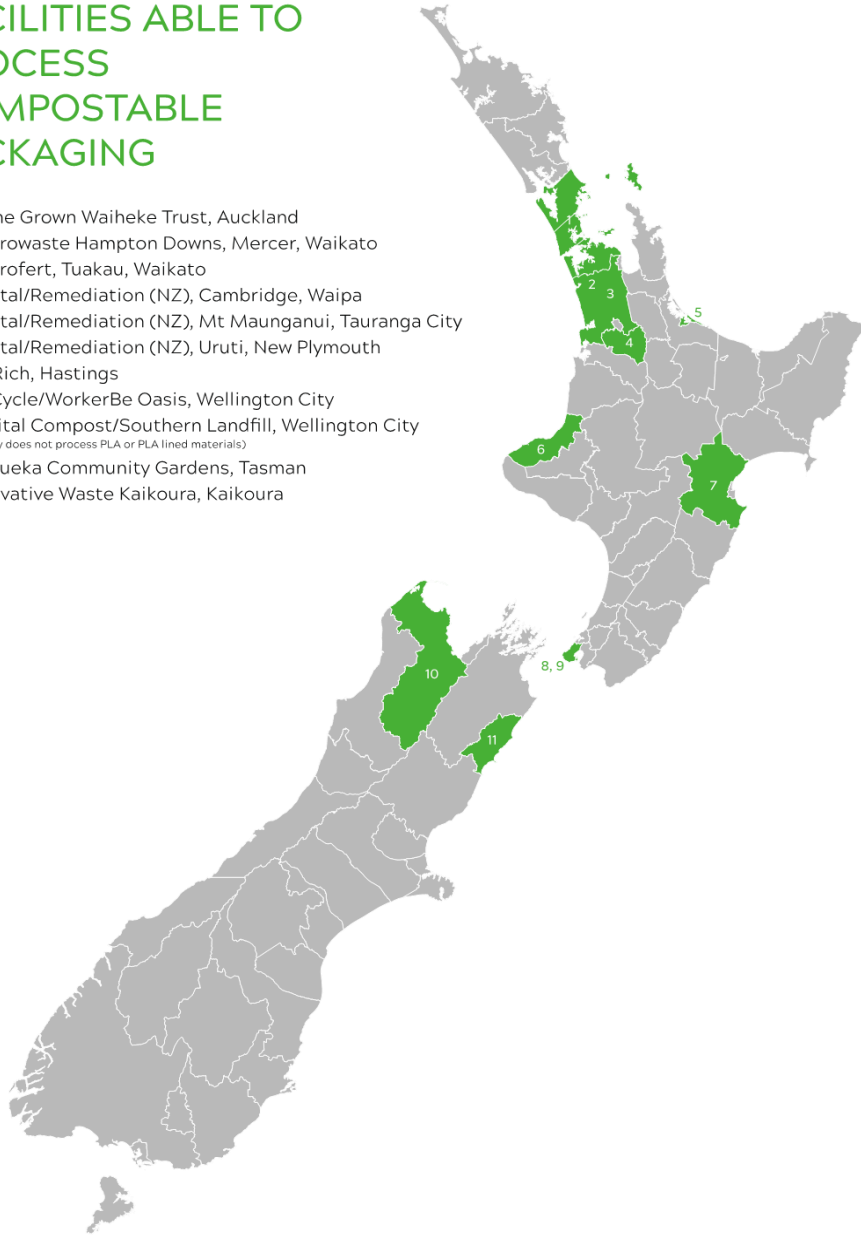
81% thought it would be helpful to have a symbol to identify compostable products which have met a standard

Comments:

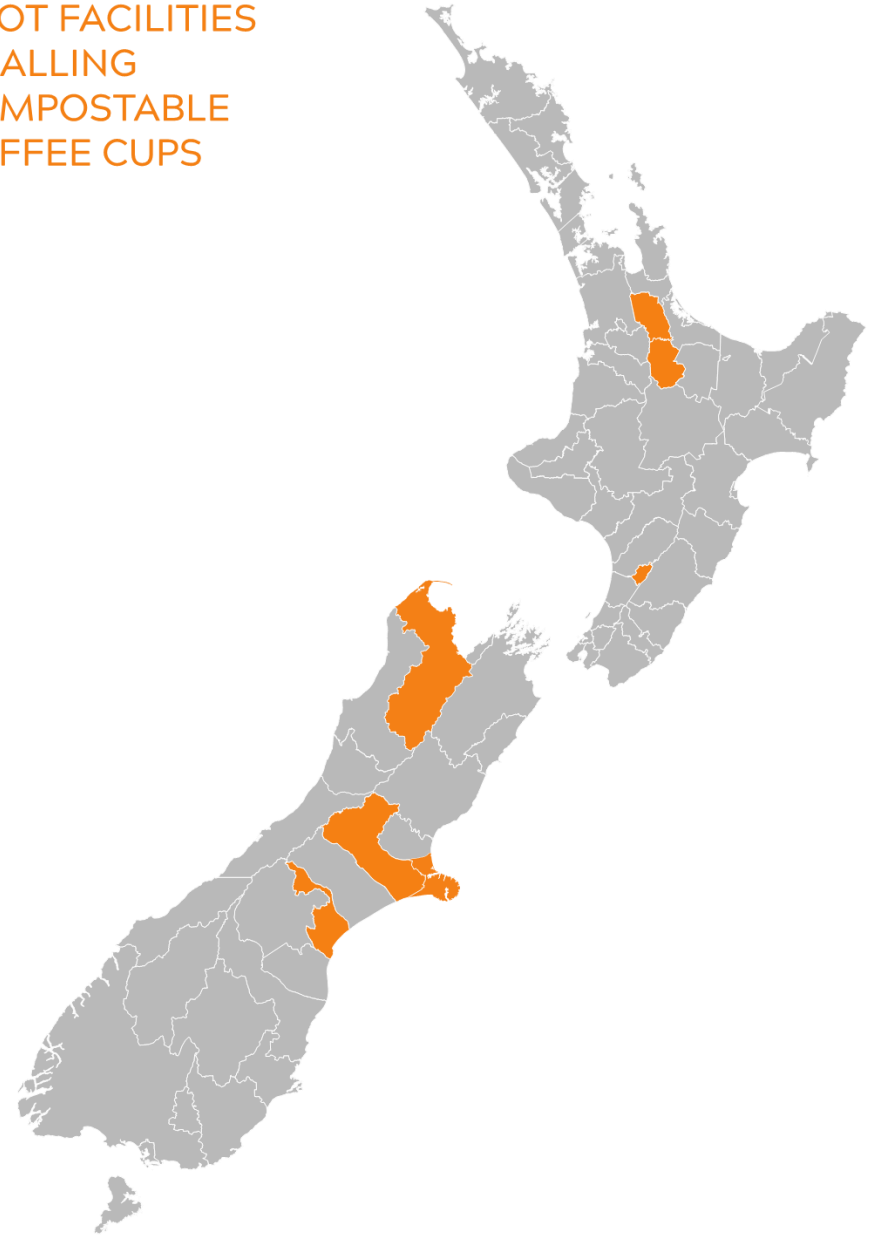
- Absolutely, needs to be simple
- Recognisable at a glance
- Definitely
- Yes absolutely but with clear methodology around what it means
- Yes, lots of confusion out there
- Let's get rid of the word biodegradable
- Would make our job easier

FACILITIES ABLE TO PROCESS COMPOSTABLE PACKAGING

- 1 Home Grown Waiheke Trust, Auckland
- 2 Envirowaste Hampton Downs, Mercer, Waikato
- 3 Envirofert, Tuakau, Waikato
- 4 Revital/Remediation (NZ), Cambridge, Waipa
- 5 Revital/Remediation (NZ), Mt Maunganui, Tauranga City
- 6 Revital/Remediation (NZ), Uruti, New Plymouth
- 7 BioRich, Hastings
- 8 KaiCycle/WorkerBe Oasis, Wellington City
- 9 Capital Compost/Southern Landfill, Wellington City
(facility does not process PLA or PLA lined materials)
- 10 Motueka Community Gardens, Tasman
- 11 Innovative Waste Kaikoura, Kaikoura



PILOT FACILITIES TRIALLING COMPOSTABLE COFFEE CUPS



Recommendations to the working group

- Identification and logo development
 - Define parameters of such a logo
 - Work with industry bodies
 - Support research into mislabelled products
- Product innovation to make products break down faster in composting environment
- Trials
- Communication across both industries
- Support investigation into small scale solutions

What is the packaging industry doing? industry working group

What's the optimum solution –
compostable or **recyclable**?

Sometimes we need to create a problem
to solve a problem

- Localised solutions
- Clarity for consumers
- Work in progress





Product innovation: compostable cups

- Compostable packaging is any packaging made entirely from plant-based materials that composts into carbon, nitrogen, water and other organic material within a certified amount of time (12 weeks), and has no negative impacts on the toxicity of the compost. Cups are commercially compostable. (Innocent Packaging)
- Challenge: Design cups which will meet a home compost standard
- Examples: Ecoware compostable lid 100% plant based and opens up the ability for home composting if the household has an active compost at an average temperature of 30+ degrees.



Product innovation: paper/plastic cups

- Design a recyclable cup
- Work with waste companies to ensure it can be processed
- Identify end markets for the recovered materials
- Example: The RecycleMe™ cup is engineered to be processed by standard recycling systems, allowing for the paper materials to be recovered efficiently and economically to be reused in premium recycled paper packaging. 96% cups can be made into products such as paperback covers and cardboard boxes. Trial venues are in place for collection.



Identification

- Work with WasteMINZ and other industry bodies on identification standard
- Define clearly who can use a logo and the process surrounding permission
- Support investigation of mislabelled products



Investment

- PPRS funding requirements for events – need to have waste separation/sortation to create clean waste streams
- Investigating opportunities for standalone compost units for small scale local solutions
- Build partnerships to:
 - collect and recycle **recyclable** cups
 - Air NZ initiative
 - collect and compost **compostable** cups
 - Z Energy collect at 70 sites
 - collection trials - Coca Cola Amatil/Ecoware